

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-17 (canceled).

Claim 18 (new): A riding vehicle comprising:

an automatic transmission including a clutch actuator and a shift actuator arranged to execute a gear shift change;

a multiplate clutch controlled by the clutch actuator, the multiplate clutch including a bias member arranged to enlarge a clutch partially engaged region of the multiplate clutch by changing a rate of change in which transmission torque is transmitted by the multiplate clutch; wherein

during the gear shift change, both the clutch actuator and the shift actuator are arranged to operate in an overlapping manner.

Claim 19 (new): The riding vehicle according to claim 18, wherein the bias member is a coil spring.

Claim 20 (new): The riding vehicle according to claim 18, wherein the bias member is arranged to enlarge the clutch partially engaged region by reducing a rigidity of the multiplate clutch.

Claim 21 (new): The riding vehicle according to claim 18, further comprising:

a control apparatus connected to the clutch actuator, the control apparatus being arranged to control the multiplate clutch from a first state of starting to transmit a drive force on a side of an engine by transmitting an operating force to the clutch by way of an operating force transmitting mechanism to a second state of starting to rotate the

clutch in synchronism with the side of the engine by making a stroke by a predetermined amount by the clutch actuator; wherein

the bias member and the multiplate clutch are arranged such that when a temperature of the clutch is changed, a first range between a stroke position on a low temperature side and a stroke position on a high temperature side in the first state and a second range between a stroke position on a low temperature side and a stroke position on a high temperature side in the second state are separated from each other.

Claim 22 (new): The riding vehicle according to claim 18, further comprising:

a control apparatus connected to the clutch actuator, the control apparatus being arranged to control the multiplate clutch from a first state of starting to transmit a drive force on a side of an engine to a second state of starting to rotate the clutch in synchronism with a side of the engine by transmitting an operating force to the clutch by way of an operating force transmitting mechanism by making a stroke by a predetermined amount by the clutch actuator; wherein

the bias device and the multiplate clutch are arranged such that when the clutch is worn, a first range between a stroke position on a side before wearing of the clutch and a stroke position on a side after wearing of the clutch in the first state and a second range between a stroke position on a side before wearing of the clutch and a stroke position on a side after wearing of the clutch in the second state are separated from each other.

Claim 23 (new): The riding vehicle according to claim 18, wherein during an overlapping operation of the clutch actuator and the shift actuator, a gear shift change operation by the shift actuator is executed in the clutch partially engaged region by controlling the clutch actuator.

Claim 24 (new): The riding vehicle according to claim 23, wherein a timing of starting the clutch partially engaged region and the gear shift change operation of the

shift actuator are controlled to be synchronized.

Claim 25 (new): The riding vehicle according to claim 18, wherein the multiplate clutch includes:

first and second clutch disks arranged on a same axis center, the first and second clutch disks arranged to rotate relative to each other around the axis center and to be brought into contact with each other and separated from each other in an axial direction of the axis center and cooperatively connected to a drive side and a driven side;

a stopper arranged to hamper the first and second clutch disks from being brought into contact with each other by moving in a first direction of the axial direction to a predetermined position or further;

a clutch spring arranged to exert an urging force on the first and second clutch disks in the first direction to bring the two clutch disks hampered by the stopper into contact with each other; and

a bias force release device arranged to enable release of the urging force of the clutch spring exerted on the first and second clutch disks by inputting an operating force; wherein

the clutch actuator exerts the operating force on the bias force release device;
and

the bias device includes a transmitting torque restriction spring arranged to urge the two clutch disks in a second direction of the axial direction to be brought into contact with each other.

Claim 26 (new): The riding vehicle according to claim 18, wherein the clutch actuator is arranged to control the multiplate clutch from a first state of starting to transmit a drive force on a side of an engine to a second state of starting to rotate the multiplate clutch in synchronism with the side of the engine by transmitting an operating force to the clutch by way of an operating force transmitting mechanism by making a

stroke of a predetermined amount, and the clutch actuator and the operating force transmitting mechanism are arranged outside of the engine.

Claim 27 (new): The riding vehicle according to claim 26, wherein the clutch actuator is an electric motor.

Claim 28 (new): The riding vehicle according to claim 18, wherein the clutch actuator is disposed inside of an engine of the riding vehicle.

Claim 29 (new): The riding vehicle according to claim 26, wherein the operating force transmitting mechanism includes a first connecting portion provided on a side of the clutch actuator and a second connecting portion provided on a side of the multiplate clutch, the operating force transmitting mechanism includes a first bias member arranged to urge the first and second connecting portions in a separating direction, and when the clutch is disconnected, the multiplate clutch is arranged to be disconnected by making the first and second connecting portions approach each other against an urging force of the first bias member by driving the clutch actuator.

Claim 30 (new): The riding vehicle according to claim 18, further comprising an electronic control device, and wherein the riding vehicle is a motorcycle and the clutch actuator and the shift actuator are arranged to be controlled by the electronic control device.

Claim 31 (new): The riding vehicle according to claim 18, further comprising an electronic control apparatus electrically connected to the clutch actuator and the shift actuator, wherein the automatic transmission is arranged to execute the gear shift change by an instruction of a driver or an instruction by the electronic control apparatus.

Claim 32 (new): The riding vehicle according to claim 18, further comprising:

an electronic control apparatus electrically connected to the clutch actuator;
wherein

the automatic transmission is arranged to execute the gear shift change through
the electronic control apparatus;

the electronic control apparatus is electrically connected to a sensor arranged to
detect a situation of the riding vehicle; and

the instruction by the electronic control apparatus is carried out in accordance
with the situation of the riding vehicle.